

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1. (currently amended) A method of reducing photoelectric device leakage current caused by residual metal ions in conjugated polymer, comprising the steps of:

(i) providing a conjugated polymer material or a precursor thereof for a photoelectric device;

(ii) forming a solution containing the conjugated polymer material or the precursor thereof, ~~a chelating agent in an amount of from 0.01 to 50% based on the weight of the conjugated polymer material or the precursor thereof, and a solvent, wherein the residual metal ions in the conjugated polymer material or the precursor thereof are chelated by the chelating agent; and;~~

(iii) adding a chelating agent into the solution such that the residual metal ions in the conjugated polymer material or the precursor thereof are chelated by the chelating agent, in an amount of from 0.01 to 50% based on the weight of the conjugated polymer material or the precursor thereof; and

(iv) forming the solution obtained from step (iii) into a film for the photoelectric device. 

Claim 2. (original) The method as claimed in claim 1, wherein the conjugated polymer material or the precursor thereof is an organic light emitting polymer material, an electron transferring polymer material, or a hole transferring polymer material.

Claim 3. (original) The method as claimed in claim 2, wherein the conjugated polymer material is selected from the group consisting of polyphenylene vinylene, polyfluorene, derivatives thereof, precursors thereof, and combinations thereof.

Claim 4. (original) The method as claimed in claim 3, wherein the conjugated polymer material is poly(2,3-dibutoxy-1,4-phenylene vinylene), poly(9,9-dioctylfluorene), or a precursor thereof.

Claim 5. (original) The method as claimed in claim 1, wherein the chelating agent is selected from the group consisting of aminophenols, sulfur compounds, crown ethers, salicylimines, and combinations thereof.

Claim 6. (original) The method as claimed in claim 5, wherein the chelating agent is selected from the group consisting of 8-hydroxyquinoline, oxinesulfonic acid, tetraethylthiuram disulfide, tetramethylthiuram disulfide, dithiol, 2,3-dimercaptopropanol, thioglycolic acid, potassium ethyl xanthate, sodium diethyldithiocarbamate, dithizone, diethyldithiophosphoric acid, thiourea, 12-crown-4, 15-crown-5, 18-crown-6, dibenzo-18-crown-6, N,N'-bis(salicylidene)ethylenediamine, and combinations thereof.

Claim 7. (original) The method as claimed in claim 6, wherein the chelating agent is 18-crown-6, 8-hydroxyquinoline, tetraethylthiuram disulfide, or N,N'-bis(salicylidene)ethylenediamine.

Claim 8. (original) The method as claimed in claim 1, wherein the film is used in organic light emitting diode devices, organic solar cell devices, organic transistor devices, organic laser devices, organic memory devices, organic resistor devices, organic capacitor devices, or organic inductor devices.

Claim 9. (withdrawn) A conjugated polymer composition, comprising at least the following:

- (a) a conjugated polymer or a precursor thereof, and
- (b) a chelating agent in an amount from 0.01 to 50 wt% based on the weight of the conjugated polymer material or the precursor thereof.

Claim 10. (withdrawn) The conjugated polymer composition as claimed in claim 9, wherein the conjugated polymer or a precursor thereof is an organic light emitting polymer, an electron transferring polymer, or a hole transferring polymer.

Claim 11. (withdrawn) The conjugated polymer composition as claimed in claim 10, wherein the conjugated polymer is selected from the group consisting of polyphenylene vinylene, polyfluorene, derivatives thereof, precursors thereof, and combinations thereof.

Claim 12. (withdrawn) The conjugated polymer composition as claimed in claim 3, wherein the conjugated polymer is poly(2,3-dibutoxy-1,4-phenylene vinylene), poly(9,9-dioctylfluorene), or a precursor thereof.

Claim 13. (withdrawn) The conjugated polymer composition as claimed in claim 9, wherein the chelating agent is selected from the group consisting of aminophenols, sulfur compounds, crown ethers, salicylimines, and combinations thereof.

Claim 14. (withdrawn) The conjugated polymer composition as claimed in claim 13, wherein the chelating agent is selected from the group consisting of 8-hydroxyquinoline, oxinesulfonic acid, tetraethylthiuram disulfide, tetramethylthiuram disulfide, dithiol, 2,3-dimercaptopropanol, thioglycolic acid, potassium ethyl xanthate, sodium diethyldithiocarbamate, dithizone, diethyl dithiophosphoric acid, thiourea, 12-crown-4, 15-crown-5, 18-crown-6, dibenzo-18-crown-6, N,N'-bis(salicylidene)ethylenediamine, and combinations thereof.

Claim 15. (withdrawn) The conjugated polymer composition as claimed in claim 14, wherein the chelating agent is 18-crown-6, 8-hydroxyquinoline, tetraethylthiuram disulfide, or N,N'-bis(salicylidene)ethylenediamine.

Claim 16. (withdrawn) The conjugated polymer composition as claimed in claim 9, which is used in organic light emitting diode devices, organic solar cell devices, organic transistor devices, organic laser devices, organic memory devices, organic resistor devices, organic capacitor devices, or organic inductor devices.

Claim 17. (withdrawn) The conjugated polymer composition as claimed in claim 9, further comprising a solvent.